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# FREE INDIA

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# Social And Legal Curbs On Dowry Seekes

PRATAP C. DUTTA

Mahatma Gandhi would have welcomed the anti-dowry campaign that is being mounted in the Capital and other parts of the country through citizens' reform and vigilance committees manned by local leaders and social workers. This awakening is quite in keeping with his valuable and far-sighted guideline on dowry.

The break from this social bane has not advanced very far from the time when the birth of a girl was a source of worry and the arrival of a son a source of joy. For, owing to the dowry system, the daughter would be a grave financial liability and the male child a good potential investment. Mahatma Gandhi condemned this attitude thus: "Invidious discrimination against the female sex is an anachronism. I fail to see any reason for jubilation over the birth of a son and for mourning over that of a daughter. Both are God's gifts. They are equally necessary to keep the world going."

This discrimination has its genesis in the widely prevalent custom of demands for dowry by the bridegroom's parents and their forced acceptance by the bride's guardians. Condemning this custom, Gandhiji further observed: "The system must go. Marriage must cease to be an arrangement for money. The system is intimately connected with caste. The girls and boys and their parents will have to break the bonds of caste if the system is to be eradicated." It is, therefore, gratifying that the anti-dowry compaigners will, at the same time, be concentrating on the promotion of inter-caste marriages.

The sweeping away of caste barriers is bound to have a salutary effect inasmuch as the dowry-seekers will not be able to have it all their own way. The parents of a marriageable girl who now feel hedged in by a narrow circle from which they have to choose a match for their daughter will have a wider choice outside the caste net. The scope for exploitation by the boy's parents is thereby cut down; the inter-caste marriages are not generally hard dowry bargains; rather in many cases they are known to have been singularly free from the commercial taint.

Gandhiji stood for equality of the sexes. Commercialisation of marriage which places the young girl and her parents in an inferior, disadvantageous position deeply hurt his sense of fair-play. 'The only honourable terms in marriage", he observed, "are mutual love and mutual consent". Urging young girls to remain spinsters rather than marry dowry-seekers, he emphasised: "If I was born a woman, I would rise in rebellion against any pretension on the part of man that woman is born to be his plaything."

Moral appeals and pressures, useful in their own way, are by no means an adequate substitute for legal curbs in a social set-up

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## Words to Remember

[Excerpts from the speeches of the Prime Minister]

Inaugurating an academicians' convention on problems and patterns of development—education, democracy and social change, the Prime Minister said that university teachers and academicians should not confine themselves to the four walls of class rooms but to enlarge their spheres of activity and create a national atmosphere for social transformation.

The educational system should be related to rural needs and rural problems. It should be linked to rural wisdom also.

People should be made conscious of the fact that Indians had a way of life and every Indian problem had an Indian solution too. The tendency to denigrate everything Indian and looking upon everything foreign as being superior must end.

The people had tended to ignore the very basis of Indianness. The country needed, no doubt, scientists and technologists. But more than these, India needed people who felt themselves Indians first and last.

Democracy was not an end in itself. It had to serve a purpose. One could not have a democracy which was not pertinent to national strength and survival.

An anti-administration stance was always desirable considering that it helped to build up pressures on the administration to be dynamic and change with the changing Indian society. But this anti-administration fashion should not be stretched far afield to destroy the administration.

* * *

Addressing the first Indian Agriculture Congress, the Prime Minister said: "We cannot keep the prices of farm produce at the high levels reached during periods of scarcity. Inflation does not help farmers. High prices for foodgrains and commercial crops ultimately lead to demands for higher wages and dearness allowance in industries, and farmers themselves are then constrained to pay higher prices for their inputs.

The Government had been giving the highest attention to increasing agricultural output. This was an essential element of our fight against poverty and also of our national security and self-reliance. "That is why we can almost call agriculture as 'Adi Mantra'."

"We cannot afford, mechanisation and large scale farming. Our methods should be such as to promote the fullest utilisation of enormous manpower."

* * *

Addressing the national convention on public enterprises, the Prime Minister declared that the progress and success achieved by India have been spectacular by any standards—eastern or western—of developing countries or developed countries.

The economy as a whole had performed well this year. After five years of problems and challenges, they were now in a position to move safely along the road of national development. In this task, the public enterprises had a very big role to play.

"Profits are one way of testing the managerial efficiency, but higher profits should not be achieved by the use of Government power to raise prices."

"Profits must come through better capacity utilisation, better efficiency and better cooperation with labour. Cost consciousness must become more pervasive than it has been."

"In India, we tend sometimes to be satisfied with something which is less than the best. Perhaps this atmosphere grew because of lack of competition. Today we must attach basic importance to quality. We are exporting many industrial commodities. Every item bearing the label "made in India" plays a part in enhancing the image of our country and of our people."

**THUS SPAKE THE MAHATMA**

Not to believe in the possibility of permanent peace is to disbelieve in the Godliness of human nature.

ASOKA SCENTED BETEL NUT POWDER

Free India

SUNDAY April 25, 1976

## CONSUMPTION LOAN FOR LANDLESS

Big efforts are being made to put an end to rural indebtedness. Steps so for taken have made the poor in the villages in a really difficult position.

All sorts of people, even those with fixed high income, have taken advantage of the debt relief acts and have dodged repayment. The real sufferers are the small scale money-lenders and the landless labour.

The problem in village is not understood. Small loans, say within Rs. 50, are usually taken to meet some urgent unforeseen expenses like sudden illness. Such demands were met by the local pawn-brokers, taking whatever security was available. The interest was high but the help was timely, for which the borrower is usually grateful.

No banking institution can meet these demands at odd hours. The right approach will be to regularise the pawn-broker Act in such a way that enlightended and sympathetic people in rural areas will come into the field. Educated credit worthy young people can be provided with loans by banking institutions at low rates of interest, which they can lend to the poorer classes at a slightly higher rate on his own responsibility.

Only a scheme like this can solve the problem of providing consumption credit, especially in villages.

# The Air Force Museum

The richest collection of treasures of Indian military aviation are on display in the Indian Air Force Museum, near New Delhi's International Airport at Palam. The museum which was established in 1955 at the Air Headquarters, was shifted to its present site nine years ago.

The IAF Museum collects, preserves, and displays all available material recording the history of the Royal Indian Air Force. Exhibits at the Museum depict Indian Military Aviation history from the time the Air Force flew only the Wapiti aircraft to the present supersonic MiG. The Museum ensures that most of the tangible evidence of the Air Force's heritage is preserved and displayed for posterity.

The museum hangar shows eighteen types of military aircraft, that have formed the backbone of the Indian Air Force since its birth on October 8, 1932. The exhibits include a Wapiti, a Tigermoth, an Auster, a Lysander, the famous pair of Spitfires and an Hurricans (which won the battle of Britain against the Germans), and Vampire jet (the Indian Air Force's first jet aircraft), Ouragan (known to us Toofani), and the famous Indian made Gnat which made a name for itself in 1965 and 1971 wars. Ilyushin-14 (Meghduta, as named by Pt. Nehru), once the winged chariot of the greatest in the country, rests among the old war birds, in the hangar. At one corner are kept remnants of the Pakistan Sabre jet aircraft shot down by our pilots.

### SUICIDAL PLANE

The Japanese Kamikaze aircraft (suicidal plane) brought by the Indian Air Force from Japan catches the eye of the visitor to the museum. The famous British battleships, "The Repulse" and the "Prince of Wales" were destroyed by Kamikaze aircraft during the II World war. In another corner is the Sikorsky helicopter, that carried to safety many of our wounded soldiers during the Chinese aggression in 1962.

Outside the hangar, there is a tall unit of SU-7 aircraft, which was flown back in damaged condition by Wing Commander Mangat during 1971 operations. He was awarded Maha Vir Chakra for displaying gallentry, determination and professional skill of the highest order in a number of interdictions and close support missions deep into the enemy territory in 1971 war. A B-24 Liberator, of World war II vintage, is positioned outside the hangar. Sometime back the Indian Government presented a Liberator aircraft to Canada for their aircraft museum in exchange for a Lysander which was presented by Canada to the Indian Air Force Museum

### GOOD PORTRAITS

A visit to the Museum starts with the Gallery which houses magnificent portraits of Lieutenant Indra Lal Roy, Flying Officer Nirmal Jeet Singh Sekhon, PVC, and others. The oldest exhibits are sketches of World War I aircraft by Lt. Roy and his personal papers. He was one of the first Indians to join the Royal Flying Corps in World War I, about 15 years before the Indian Air Force was born. Lt. Roy accounted for 9 enemy machines within 18 days, in World War I, and was the first Indian officer to be awarded the Distinguished Flying Cross, which was awarded to him posthumously. He was killed in action on July 22, 1918, in France. A colourful portrait of Flying Officer Sekhon reminds one of his valiant deeds which earned him Param Vir Chakra, in 1971, during the Indo-Pak War.

### PHOTOS & TROPHIES

The first hall contains a photographic history of our Air Force from the early days in Risalpur to the latest group photograph of the top echelons of the Air Force. These are evocative of their period and will serve to teach others something of the nature of traditions and growth of the IAF and atmosphere of the service at that time.

Displayed in the second hall are many of trophies acquired by the Indian Air Force in War with Pakistan and the gifts presented by fraternal Air Forces. The Portugese Flag and the insignia of Portugese Armed Force captured in Goa are kept in a glass case in the hall. One corner of the hall is decorated with the ceremonial swords presented to the Chiefs of Indian Air Force by public, old uniform of a Howai Sepoy and of an Indian Air Force Officer of 1930's are also on view.

Notable items in the last hall are weapons and 'secret' paper of Pakistani aircrew and saboteurs. A corner of the hall displays photographs and uniforms of Hony. Group Captain HS Malik who shot down a German aircraft in the World War I. He continues to take keen interest in the Indian Aviation in general and the Indian Air Force in particular.

### LASTING TRIBUTE

The Museum reflects the very best of what the IAF has stood for in war and peace. Its compilation is, in itself, a lasting

(Contd. on page 7)

# VINOBA ON BHOODAN

"It is my humble claim that Bhoodan is such a common programme as reflects the deepest yearnings of the people. All agree that the landless must get land. If they get it in a peaceful and noble way, so far so good. There can be another programme too of this nature. But now that one is already in hand, I want you to think deeply whether all of you should not take it up."

x x x

"The question is not merely of receiving land from one and distributing it to another. The objective is the creation of the real mental transformation in the people which will make each to do his *Dharma*. If her land problem is solved through love, India will shine as a guide to the whole world."

x x x

"The Bhoodan movement is founded on the rock of love and universal brotherhood of man. We in India should make a start towards our ultimate goal of oneness of the world by considering ourselves as Indians first. We must rise above parochial and caste distinctions. Bhoodan knows no language except the langnage of love."

"I regard Bhoodan a historical necessity. In the initial stages, its flow will be small like the Gangotri. But in course of time, it would grow into a big and holy stream."

x x x

"I have been receiving land donations all these years in differant parts of the country and a new atmosphere has been generated for solving this problem through peaceful and non-violent methods. Gandhiji had always shown us the path of peace and love. Today the world is weary with violence and does not know what to do. The multiplication of armaments can never solve our problems. Gandhiji had placed before us the principle of Trusteeship. Some people think that the Bhoodan and Gramdan movements run counter to the Trusteeship idea, because they involve the surrender of proprietary rights. I should, therefore, like to explain my concept of Trusteeship. Father and mother are the trustees of their children, and there can be no better example of trusteeship than this. The parents care for their children even more than for themselves and try to train them up for taking over the responsibility of management as early as possible. The same spirit has been inspiring the Gramdan movement all these years."

# Record Growth In LIC's New Business: South Leads

In the last year of the second decade of its existence the Life Insurance Corporation of India has completed Individual New Business of Rs. 2,117 crores in the year 1975-76 registering a growth of 19.5% over previous year.

The Corporation has also recorded an impressive growth in its Group portfolio by writing Rs. 3,270 crores. This shows a growth of 143.9 % in the Group portfolio. The spectacular work done in getting all the Armed Forces covered under these schemes and adding to an already impressive array of schemes completed in U. P., a Group Insurance Policy covering over 400 000 U.P., Government employees was the reason for it.

Thus, in the 20th year of its working the LIC has completed total business of Rs. 5 387 crores as against Rs. 3,113 crores brought in during the year 1974-75.

Releasing the new business results, Shri R. B. Pradhan, Chairman of the Life Insurance Corporation of India, stated in Bombay that, while the Corporation had to face a number of problems in the years 1973-74 and 1974-75, its growth in the current year has more than made up for the slow pace.

Shri Pradhan mentioned that the Corporation's growth in the year 1975-76 has been notable. The results have been impressive in the background of the competition in the savings field.

### SOUTH ZONE LEADS

For the year, in regard o individual business, the first three Zones are the Southern Zone with Rs. 572. 91 crores, Western Zone with Rs. 508.47 crores and the Central Zone with Rs 359.51 crores. In terms of growth rate, however, the credit goes to the Northern Zone with 36.7%, Central Zone with 19.5%, followed by Eastern Zone with 18. 8%.

In terms of growth amongst the 41 Divisions, Jaipur leads the field with 65.2%, followed by Trivandrum with 60 9%, Ajmer with 59.4%, Raipur with 36.5% and Agra with 34.0%.

In terms of absolute increase in sum assured during the first place goes to Trivandrum Division with an addition of Rs. 24.78 crores over the previous year, followed by Delhi with Rs. 22 9 crores, Calcutta with Rs 19 52 crores, Bombay with Rs 19 38 crores and Ajmer with Rs. 17.30 crores.

Amongst the Divisions on the basis of volume of business, Bombay, as usual, occupies the premier position having brought in Rs. 222.43 crores, followed by Calcutta with Rs. 120.36 crores. Delhi steals the third position from Hyderabad by completing Rs. 94.68 crores, followed by Hyderabad with Rs. 89.80 crores and Ahmedabad with Rs. 88.57 crores.

In terms of number of policies the maximum increase is shown by the Jaipur Division with a growth of 50.3%, followed by Ajmer with 44.4%, Trivandrum with 39.1%, Raipur with 31.4%, Chandigarh with 27.5%, Gauhati with 25.4%. The Ahmedabad Division takes the first place by virtue of adding the maximum number of policies over the last year, followed by Trivandrum, Ajmer, Gauhati and Jaipur.

### GROUP INSURANCE

The major contribution was from the Group Insurance cover provided to all the Defence Services, viz., the Army, the Navy and the Air Force and to the U. P. Government Employees. During the year the Corporation also introduced Group Insurance Scheme for Bidi Workers in Maharashtra, Cashewnut workers in Kerala as also Municipal Corporation Staff in Lucknow Municipal Corporation. Shri Prodhan expressed his thanks to the Government, the public sector and the private sector for the increasing interest they were showing in providing Group Insurance cover for their employees. The Corporation was able to complete 1978 Schemes during the year enabling a number of organisations to provide Gratuity with additional life insurance cover to their employees. In terms of the number of schemes introduced, the following Divisions rank among the first five: 1. Bombay, 2. Delhi, 3. Trivandrum, 4. Calcutta, 5. Hyderabad & Ahmedabad.

Although the Northern and the Central Zones have the advantage of covering big groups during the year just ended, the other Zones are also keeping pace. The Chairman mentioned that there is further scope for developing group business and looked forward to the new year bringing in further schemes to enable LIC to provide more mass coverage, especially to people who may not otherwise be able to enjoy the security provided by Life Insurance.

Shri Pradhan said that it was necessary to bring down the level of expenses of the Corporation and also to improve its services to the policy-holders as well as the returns the policyholders get. At the same time it was necessary to improve the business further and increase the contribution to national savings. Shri Pradhan said that the business done in the year gives confidence that there is enough potential in the country and that greater efforts on the part of the field particularly in the rural areas, are necessary.

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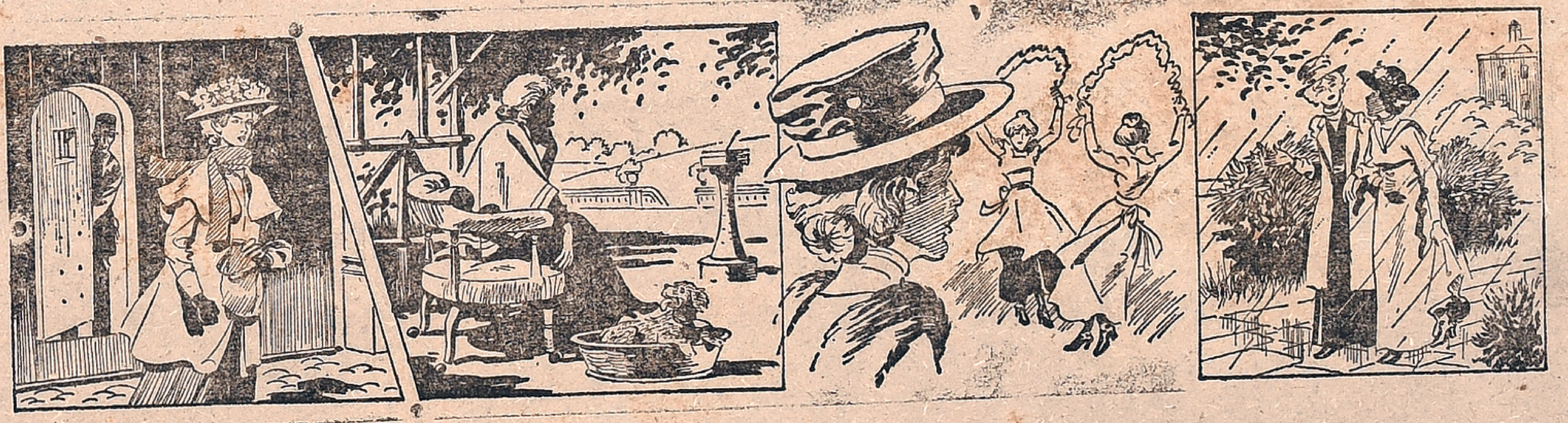
## Women Of Courage

## Lady Constance Lytton



Lady Constance Lytton experienced no joy in finding herself outside the prison gates and free in 1909. She had been furious to hear she was being released after serving only two days of a one month sentence, convinced it was her rank that had singled her out for more lenient treatment than her fellow suffragettes, fighting to get votes for women.

Daughter of the Viceroy of India, Lady Constance (1869-1923) had led a very shattered life. Pining over an unhappy love affair in the seclusion of her country home she seemed a most unlikely recruit to the movement, yet when she threw in her lot with the suffragettes, she did so with a rare sincerity.

Delicate in health and very gentle, Constance was not won to the militant cause overnight. She had originally come into contact with the movement through her deep sympathy for working class women and her interest in the Esperance Club which aimed at bringing colour into the drab lives of working women by song and dance.

Constance had decided to give to the club a small legacy she had inherited and it was at the club's holiday home in 1906 that she had been drawn to Annie Kenney, a mill girl turned suffragette, and spent hours walking arm-in-arm with her through the gardens, oblivious of the rain.

(Contd. on next page)

# FUN AND LAUGHTER

### IN BOTH CAPACITIES!

The chief constable of a small town was also an expert veterinary surgeon. One night the telephone bell rang. The chief constable's wife answered it. "Is Mr. Blank there?" said an agritatd voice. "Do you want my husband in his capacity as veterinary surgeon, or as chief constable?" inquired the woman rather pompously. "Both madam," came the reply. "We can't get our new bulldog to open his mouth, and—there's a burglar in it."

* * *

### EXACT DEFINITION!

An instructor in physics in a High School said to a young student whose vocabulary was not very extensive: 'What is a vacuum?'

The reply was: "I have it in my head, but I can't express it."

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### GRATITUDE!

Wise (after receiving a new skunk fur coat from her husband): "I don't see how such a nice coat can come from such a foulsmelling beast."

Husband: "I don't mind not being thanked, but I do ask for a little respect."

* * *

### BETTER

An Englishman complained to a Paris innkeeper that the rabbit he was eating tasted like old cat. The hotelier said he found himself covered with regret.

There was a delay before a new dish could be brought.

"Is it better this time?" inquired the hotelier.

"Yes—it's good this time," said the perceptive Briton.

The hotelier then explained: "Because this time it is old cat."

* * *

### THE REASON

"It says here that he was shot by his wife at very close range.'

"Then there must have been powder marks."

"Yes—that's why she shot him."

* * *

### ENDS NEVER MEET

"These sausages you sent me are meat at one end and breadcrumbs at the other," said Mrs. Andrews.

"Yes, madam," replied the butcher: "in these hard times it is difficult to make both ends meat."

### APT ANSWER

"Was the prisoner sober?"

"No, sir. He was drunk as a judge."

"You mean drunk as a lord."

"Yes, my lord."

* * *

### SNAIL SLOW

The diner-out had waited a quarter of an hour for his soup. Calling the waiter he asked: "Have you ever been to the Zoo?"

"No, sir," was the reply.

"Well you ought to go. You'll enjoy watching the tortoises whiz past."

* * *

### FEMININE LOGIC

A young husband who had agreed to buy a vacuum cleaner was disturbed when he found that his wife had ordered the de luxe model instead of the standard. "But, dear," his wife explained, "it won't cost any more! All we have to do is to pay a little longer."

* * *

### NOT SO QUICK!

Annoyed on account of the non-delivery of a new car he ordered, a man wired the President of the company: "Cancel order immediately."

He received the reply: "Regret cannot cancel immediately. You must take your turn."

### Word For Word

"But I thought..." began the typist, meekly.

"It's not your business to think," snapped the manager. "Just you take down what I say, word for word and keep your own ideas to yourself."

So that afternoon the following letter was brought for him to sign:—

"Dear Mr. Browne-Write if with an 'e.' Pure swank—his father was a gardener. With regard to your letter, of whatever date it was; I can quote you the following prices. Hi! Thompson! It's that outsider Browne. How much shall we stick on? Twenty per cent! Make it thirty? Rightto. Thirty bob—two pounds ten a ton. Awaiting your esteemed order, I am, yours truly". That's settled him.

### FORWARD LOOKING

Prospective father-in-law to his daughter's young man; "And what are your prospects?"

"Oh, pretty good! Unless your daughter has misled me?" was the reply.

* * *

### PROGRESSIVE!

A 10-year-old pupil at a progressive school in Washington returned home one afternoon with his report card.

"What are your marks?" his mother asked.

"I got 28 in geography, 32 in arithmetic, and 35 in spelling. But," and a proud smile swept over his face, "I got 95 in post-war planning."

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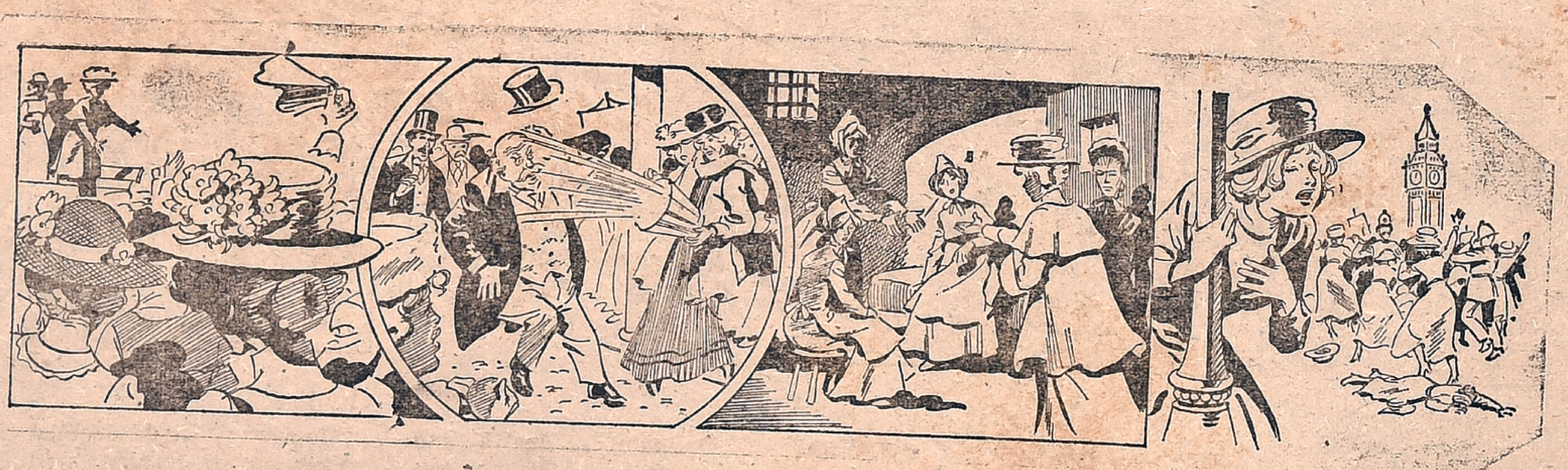
## Women Of Courage



At the time Constance still believed that social reform was more urgent than votes for women, but over the next couple of years she attended many rousing meetings held by the courageous suffragette leader Mrs. Emmeline Pankhurst and her daughters Christabel and Sylvia. Gradually she was converted.

Constance first entered the arena when she appeared at the House of Commons to lobby Members of Parliament on behalf of suffragettes in prison. Despairing of ever achieving suffrage by non-violent means, the women had become increasingly militant, making physical attacks on MPs and public buildings.

Well-known personally to many of the leading MPs, Constance had caused a stir but had been unsuccessful in her efforts to obtain the First Division treatment that earned privileges normally accorded political prisoners for Mrs. Pankhurst, Christabel and a comrade. She was however permitted to visit them in their cell.

Greatly moved by what she learnt of the plight of working women in prison, Constance was now ready to take action. Early in 1909 at the age of 39 she took a prominent part in a demonstration outside the House of Commons, but her weak heart caused her considerable discomfort in all the turmoil and struggling.

# TUBE TRAVEL

[Container transport in tubes is regarded as one of the conveyance methods of the future. Professor Oleg Chembrovsky, Director of the USSR Research Institute Transprogress, talks about the development of new form of transport.]

IT is said that new ideas are really old ones which have been long since forgotten. As far as tube transport is concerned, this is quite a true reflection of the facts. The idea was first mooted in 1827 when an Englishman, Madhurst, proposed a system of socalled "atmospheric" roads. By the middle of the 19th century several such roads had been constructed in Europe. Trains powered by atmospheric pressure raced along them at speeds of up to 60 kph, which were unprecedented for those days. But there was not sufficient technical know-how at that time for this kind of transport to be successful. The "atmospheric" roads were unreliable to operate and had been almost forgotten by the start of the present century.

## MAIN ATTRACTIONS

We only resurrected this system in the second half of the 20th century when, with the intensification of the transport problem, science was forced to turn to many old ideas. The main attractions of tube transport are its speed, which may be as much as several hundred kilometres an hour, and high carrying capacity. It is indifferent to the vagaries of the weather, does not pollute the atmosphere and provides an uninterrupted transport link between points separated by vast distances. Perhaps no other form of transport is able to offer so many advantages. The technical difficulties which prevented the development of pneumatic transport one hundred years ago present no problems for the experts of today. Freight systems propelled by compressed air are now operating in several countries.

The Soviet Union's first pneumatic way (Lilo-1) was built three years ago. It transports crushed-stone from a quary near the village of Shulaveri in Georgia to works manufacturing reinforced concrete materials situated some two kilometres away. The tube is one metre in diameter and carries a train of six container-capsules, which can transport 15 tons stone at a time. Loading and unloading are fully automated and just one minute is needed for each operation.

Work on the construction of a three-kilometre non-stop pneumatic system is going on at mining and concentration complex in Sychev, Moscow Region. On completion a seven-ton gravel container will move up for unloading every 15 seconds. An eleven-kilometre tube transport system developed by Soviet experts is now being built in Leningrad for the transportation of domestic wastes to a refuse disposal plant.

In the next few years it is planned to construct about 30 pneumatic container tube systems. They will have a total carrying capacity equal to that of 20,000 ten-ton lorries.

## FOR PASSENGER TRANSPORT

Naturally, the designers are giving thought to passenger transport too. A plan has been drawn up for a six-kilometre passenger "pneumo-way" which will pass through the industrial and residential areas of Zelenograd, a town not far from Moscow. The trains for this system whose ten carriages will each accommodate up to 125 passengers, will be able to transport some 40 000 passengers an hour. The cost of constructing a pneumatic tube route is much less than that of constructing the same length of an under-ground railway line.

But designers and scientists are looking even further and seeking fundamentally new solutions in the development of tube transport. Our institute has a special testing ground near the town of Ramenskoye, not far from Moscow, for trying out new ideas. Let me mention just a few of them.

In normal pneumatic container transportation a great deal of inconvenience is caused by the conveyance of the empty cars. One must either build a second tunnel or lose time in sending back the empty containers. We are now studying the possibility of transporting a load pressed into briquettes which would in certain cases avoid the use of containers. At the testing site we are trying out a system which can load and unload containers on the move so saving valuable seconds. The designers of another system have turned their back on the element to which tube transport owes its origin—air. Instead of compressed air the trains will be powered by electricity. The role of stator will be played by the tube itself and a rotor moving inside it will pull the containers behind it.

These and other new ideas embodied in original designs have become widely known both in the Soviet Union and abroad. Soviet experts have been granted about 50 patents in the United States, Britain, France, Federal Republic of Germany and Italy for inventions in the field of tube transport.

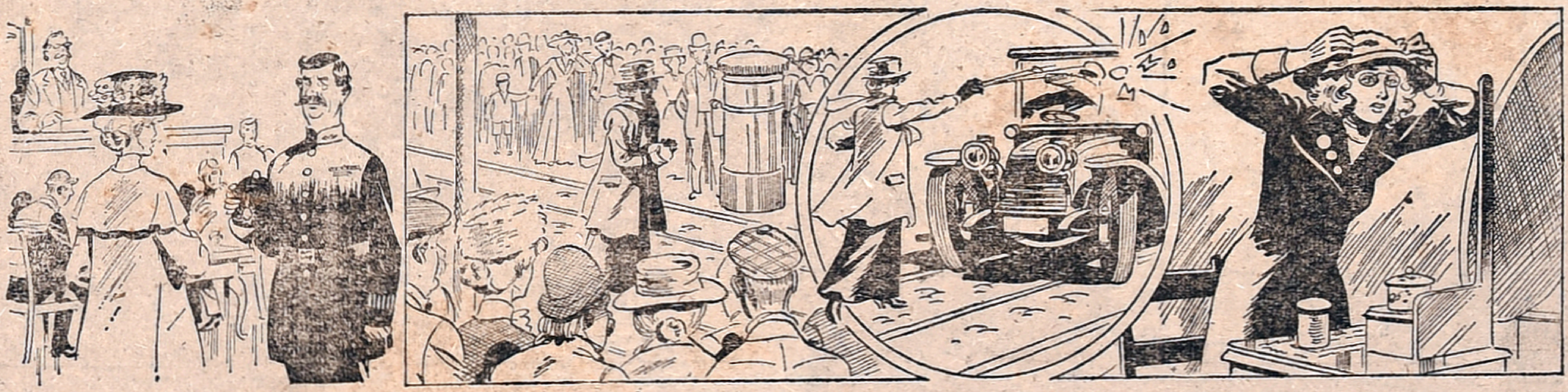
## Fraction-Separating System

An automatic fraction-separating system which uses a small computer has been developed by an American firm for hospital, research, industrial and police laboratories who use chromatography to analyze substances or divide small quantities of material into its component substances.

The system manufactured by Market Engineering Services Inc. in Turnersville, New Jersey can be operated by personnel who do not have the background or training to use complex conventional fraction-collecting systems usually associated with chromatography.

The system may be used with 110 or 220 volts alternating current, 50 to 131 cycles, 48 to 440 Herz. The manufacturer says the system can be set up in only a few minutes and can fit into a refrigerator or other small environmentally controlled enclosure.

## Lady Constance Lytton



Although there was a pronounced streak of sadness in Constance's make-up, she also had a great sense of humour and was very amused at Bow Street Court when she and the policeman who had arrested her stood opposite each other like "partners waiting for a country dance to strike up."

In prison she hated being separated from her friends, since she was confined to the hospital on account of her heart condition, but her spirit never flagged and the following October crowds jostled each other in the streets of the northern town of Newcastle to watch her stride purposefully along between the tramlines, stone in hand, bent on making a gesture.

Down the road came luxurious motor-car of an important personage, host to a leading M.P. Fragile, elegant, and quite unpractised in this sort of thing, Lady Constance threw her sizeable stone, inscribed with a defiant message for the M.P. True to suffragette policy, she refused to pay a fine and went to prison.

Her discharge after two days distressed her and she determined to bulk this deference to her health and rank and to share all the sufferings of her comrades. In Liverpool on 14 January 1910, her hair already cut short, she dressed herself in the shabby but respectable clothes of a poor seamstress.

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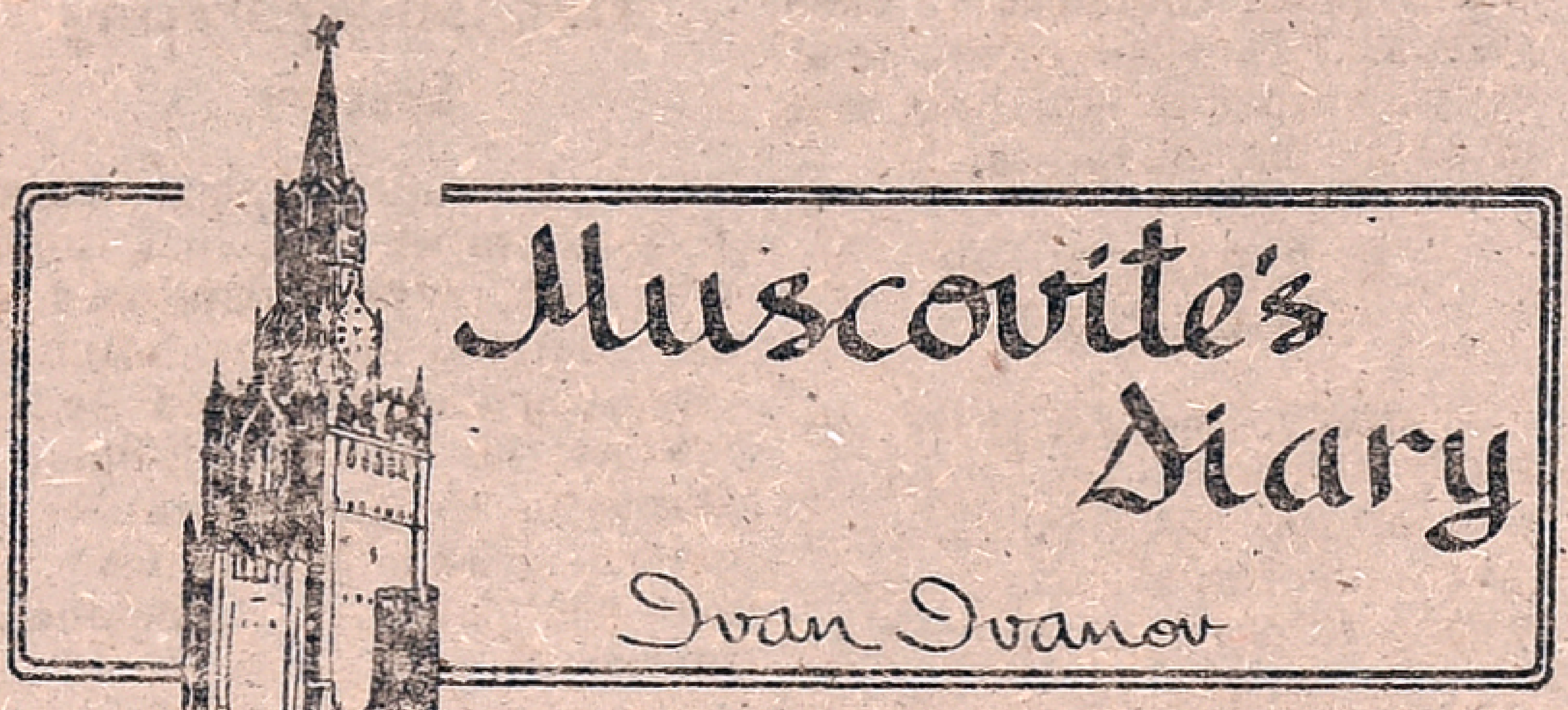


### NDIA'S SECOND SPUTNIK

India's second artificial earth satellite will be launched from a Soviet cosmodrome in 1978. Its technical project and scientific programme were discussed in Moscow at a working meeting of a joint group of Soviet and Indian specialists.

This meeting at the Moscow Institute of Space Exploration opened on the day of the first anniversary of the launching of ARYABHATA. "Today, a year after it was launched, the sputnik which was designed to operate for six months, continues to send clear signals back to earth," said Dr. Rao, Director of the joint project from the Indian side, in an interview.

We continue to receive a wealth of information on various characteristics of the near-earth space at the observation station in India and also at the tracking station near Moscow.

Touching upon the programme of operation of India's new sputnik, Dr. Rao said that its "scientific interests" would be linked mainly with the earth. The sputnik is intended for the study of natural resources of the country, for establishing a permanent service of observation of the flora and water resources on the territory of India.

"We have been cooperating with Soviet colleagues in space meteorology for five years. In all, 250 meteorological rockets were launched from the meteorological testing range in Thumba over the time. Besides, national research centres were established in different towns of India. These centres mastered the foundations of space technology.

"The second Indian sputnik, as different from the first one, will be entirely built at Indian enterprises, and Indian observation stations will work with it," Dr. Rao informed.

### REPOSITORY OF DOCUMENTS OF LENIN

At a time when the 106th birth anniversary of Lenin is being celebrated, readers may be interested to know that there are more than 34,000 reposition units in the USSR's Lenin Fund at the Central Party Archives of the Institute of Marxism-Leninism at the CPSU Central Committee, the only State repository of documents of the founders of scientific communism.

There are manuscripts of books, articles, reports, speeches by Lenin, his letters, memos, notes on books. More than a thousand originals, kept in the USSR, were written by him in nine foreign languages. In the Fund there are 396 photographs of Lenin, 874 metres of film showing him in his life-time, 14 discs with his recorded speeches.

Lenin's literary and documentary heritage was collected as fully as possible, but part of the works are known only as published. Some Lenin's papers and letters which are of great scientific value, have not been found. A search is going on for these. As a result 334 Lenin's documents, 300 of them originals, entered the Central Party Archives in 1974–1975.

Foreign newspapers and clippings from them, collected in the years of the First World War, have lately been examined at the Central Party Archives. Different notes, inscriptions, underlinings made in Lenin's hand on 239 newspapers and clippings have been established.

A number of materials of the pre-October period came from abroad. The main part of the documents of the Soviet period were revealed in Central State Archives in the process of cataloguing the most important funds and in the course of study of materials to prepare a many-volume biogrgphical chronicle of Lenin.

### INDIRA GANDHI'S LETTER TO PAK WELCOMED

"An important step has been made along the lines of normalising Indo-Pakistani relations," writes TASS commentator Oleg Pleshov in an article. The exchange of letters between Indira Gandhi, Prime Minister of India, and Zulfikar Ali Bhutto, the Head of the Pakistani Government, put on the agenda, the question of restoration of diplomatic relations broken off during the conflict of 1971.

A series of agreements between India and Pakistan concluded in recent years promoted the stabilisation of the political situation in the South Asia subcontinent. The Simla Agreement signed in summer 1972 served as a basis for the development of events towards normalisation. It set going the process of restoration of good-neighbourly ties.

Restoration of diplomatic relations between India and Pakistan, in the opinion of the foreign press, will provide a juridical basis for the two countries' determination to build relationships on new principles free of suspicion and confrontation.

All countries of the area equally need peace and guarantees of security. Only in such conditions is social and economic progress possible, and only in such conditions, one can rid of the aftermath of the colonial rule.

**From previous page**

## Women Of Courage — Lady Constance Lytton

After adding three brooches bearing the portraits suffragette leaders, the touching devotion of a simple seamstress, Constance sallied forth to address a street meeting. She played her role to perfection, and urged a crowd of supporters to follow her on a march on Walton Gaol where hunger-striking suffragettes were being held.

On her arrest she gave her name as "Jane Walton" and nobody questioned it. Exhilarated by the success of her disguise, she refused food, and that night as she lay on her hard prison bed, tossing and turning, she dreamed of delicious fruit, peaches and nectarines and slices of melon.

It was no great hardship to refuse the prison breakfast the warders brought her next morning, but much more difficult as time went on not to touch the tempting meals they left in her cell, yet she would not give in. After some days, with her health rapidly deteriorating, the prison doctor became very uneasy.

Her true identity was discovered and she was released, her point made. The experience contributed to the rapid worsening of her health and the stroke she suffered soon afterwards. She was an invalid for the rest of her life but she had no regrets and celebrated jubilantly when women over 30 years of age got the vote in 1918.

—END

[NEXT WEEK :—KATE MARSDEN]

# THE MICROSURGEONS

By RONALD KOTULAK

Life was precarious for Mitchell Bogacz. If he forgot and turned his head too fast, he blackened out. It happened about twice a week. His fainting spells, dizziness and weakness were ominous reminders that he could be struck by a massive killer stroke at any time.

Doctors a the University of Illinois Medical School in Chicago had found the cause of his problem. They had carefully threaded thin plastic tubes into arteries in his brain during a test called an angiogram, then injected an opaque dye through the tubes into the arteries and followed the path of the dye with x-rays.

What they saw left them quietly amazed that Bogacz was still alive. The two carotid arteries which supply 70 per cent of the blood to the brain, were completely closed. When just one of these is shut down by fatty deposits, the shock often results in a major stroke.

In Bogacz's case, the doctors theorized that the big arteries, one on each side of the neck, had closed so gradually that the brain had time to adjust. The only blood reaching his brain came from the smaller vertebral arteries at the back of his neck. And when he turned his head to the side, the movement pinched these two arteries against his spinal cord, temporarily shutting off the trickle of blood to his brain. Instead of showing a rich net work of arteries, the angiogram indicated that his brain cells were starved for oxygen and nutrients.

There was only one hope for Bogacz ; a new supply of blood would have to be brought in to feed his brain. But such surgery is new and rare. It involves going into the brain in ways that surgeons for a long time did not dream possible.

The delicate surgery—requiring a microscope to sew tiny blood vessels together inside the brain—was first tried only in 1967 in Switzerland. But microsurgery, as it is called, is already allowing surgeons to conquer some diseases of the brain that had previously left them helpless and frustrated.

This operation is a pioneering effort—the first brain operation of this type at the university.

Bogacz's head is shaven. His face is turned to the side so that Dr. Jose L. Salazar, an instructor in microsurgery, can work on the left side of his brain.

Salazar practiced for two years before ever attempting this kind of surgery. Twice a week he worked in a new microsurgery laboratory, stitching together the tiny arteries of rats.

Normally a surgeon can see his hands and the work they do directly. But the first time under a microscope, his hands are greatly magnified and look as if they belong to someone else. The surgeon must learn to co-ordinate the movements of his fingers while looking at them indirectly, as if through a periscope.

Swiftly, Salazar makes a nine-centimeter semicircular incision in the scalp above the left ear. He carefully pulls back the skin flap and locates the superficial temporal artery. This is to be the lifeline; the artery, which normally feeds the scalp, will be rerouted down through the skull and tapped into a blood vessel in the brain.

The tough sheet of muscle covering the skull is removed, exposing the white bony structure that is the brain's major protection against injury. A battery-powered electric drill is used to bore through the bone. But the battery is weak and the bit is dull. The doctor asks for a standby drill, the bit-and-brace kind ; no time is lost. Bogacz's head is pressed downward slightly as Salazar drills two one-centimeter holes about two and a half centimeters apart.

An electrical saw—It lo ks like jigsaw—is placed in one of the holes, and a piece of bone four centimeters in diameter cut from the skull. The saw has a special guard that keeps it from touching the brain.

Underneath the skull is a strong milky-white covering called the dura, another of the brain's elaborate coverings. A hole is carefully cut through it, exposing a thin transparent membrane, the last protective barrier.

Everyone in the room pauses. There it is, the brain, the essence of man's being. Grayish in colour, its convoluted surface slowly pulsates as blood is pumped through it. It is wet from the clear cerebral spinal fluid that constantly bathes it. The liquid also acts as a shock absorber, allowing the brain to float without banging against the skull with each movement of the head. Throughout surgery, a salt-water solution will be squirted on the exposed brain to prevent the cells from becoming dry and dying.

The artery Salazar is looking for stands out clearly on the brain's surface. The bright red supply line is the middle cerebral artery, one of the three main arteries that take blood from the carotid and vertebral arteries and deliver it to the deepest recesses of the brain.

"You see, we have not touched the brain at all," Salazar points out. Doctors have a great respect for brain cells. Even slight demage to those cells could erase a memory, abort a thought, dull creativity or cause bizarre behaviour.

The most difficult part of the surgery comes next. Salazar puts two miniature clamps on the cerebral artery about one and a fourth centimeters apart. He makes a tiny slit in the clamped-off section. This will serve as the inlet around which he will sew the artery from the scalp.

The scalpel he uses is fashioned from the edge of a razor blade. "It is the sharpest thing we can find." His forceps are those that a jewelar uses, with fine tips that can barely be seen.

Looking through the side scope attached to the binocular microscope being used by Salazar, however, brings the miniature surgery into focus. Only through the recent development of these special microscopes has this type of life-saving surgery been possible ; in effect, a medical sound barrier has been broken.

Under the microscope, the field is magnified up to 16 times. Now the arteries look like soda straws. You can watch Salazar sew the end of the scalp artery over the hole he made in the brain artery. He stitches carefully and the connection is made : the new supply line is ready. Salazar removes the clamps, and blood rushes through the new connection. Then a small leak develops. The assistant holds his breath as Salazar puts another stitch in. The leak is stopped. "The anastamosis is complete," he sighs "It is working well."

Bogacz's risk of suffering a major stroke in the next year had been between 50 and 80 per cent. Now he can look forward to leading a relatively normal life.

The four-centimeter disc of bone removed from Bogacz's skull is left out. It could shift and cut off the new blood supply. The scalp will provide sufficient protection over the opening. His hair will grow back and no one will detect the scar.

Bogacz was feeling "better than ever" when he left the hospital eight days after his surgery. His brain was getting more blood. Salazar said the supply will increase further as the new artery widens in response to the brain's demand for more blood. "He's had no more fainting spells. He walks without getting dizzy, and yes, he says he even thinks better,' Salazar beams.

"I had no doubts," Bogacz says of the surgery. "I knew it was a life-saving measure. The one thing I was surprised about was that my head didn't ache any more. It didn't bother me at all, and I was up and walking around the day after surgery".

Microsurgery, while probably the fastest growing field in surgery, has applications apart from the brain, too. Dr. Boonmee Chunprapapth at Cook Country Hospital in Chicago recently reported the reimplantation of four fingers on a 23-year-old worker's hand. They had been sliced off in an industrial accident. It was the first successful reimplantation of such complexity in the world, and a microscope made the reconnection of blood vessels and nerves possible. Today, the hand with four fingers sewn on can grip a tennis racket.

One more advance in medical protection that microsurgery has made possible. The future holds promise of even more.

## S.I.F.D.A. : New Office-bearers

The following new office bearers were elected at the Annual General Body meeting of South Indian Film Directors' Association held recently: *President* : Mr A. Vincent ; *Vice-President* : Mrs. N. Sheela Devi, Mr R. Srithar Babu ; *Treasurer* : Mr N. Gopalakrishna ; *General Secretary* : Mr C.V. Rajendran ; *Joint Secretaries* ; Messrs N.S. Varma, I.N. Murthy, B.N. Prakash, and A. B. Jaganmohan Rao ; *Executive Committee Members* : Messrs. N. Venkatesh, N Krishnaswamy K.M. Balakrishnan N. Balachander, K.S. Rami Redd G. Sathyam, M.S Chakravorthy, Chi. Sadasiviah, P.N. Menon, and Mani Antnikad.

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## SHOCKING REPLY

"I don't want any calls this afternoon," said the business man to the office boy. 'If they say their business is important just tell them, that's what they all say."

That afternoon, a lady called and insisted on seeing the busy business man "I am his wife," she exclaimed.

"That's what they all say", said the office boy.

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tribute to hundreds of people who have each in their own way helped to build a glorious tradition. It is befitting fo a fighting service like the IAF to have a sense of history and tradition and never seems to throw away its old belongings because IAF Museum might almost be described as a rejuvenated attic containing some of the famous pieces of machinery that have a priceless sentimental value. In addition to aircraft, display items include aircraft models, uniforms, vehicles, medals and memorabilia. The museum captures the true aeronautical flavour of the Air Force of yesteryears.

The Museum has a restaurant The crowd you will find at the Air Force Museum is a blend of young and old. Some visitors don't know the difference between a fighter and a bomber while others will tell you all about a modern jet aircraft. Some 485 airminded visitors file through the Museum daily. In 1975 about 1,57 000 visitors visited the Museum. Its appeal is historic, nostalgic technical and artistic. Admission is free. Visiting hours : 10 A M. to 6 P. M. in summer and 10 A. M. to 5 P. M. in Winter. Tuesday closed.

# Sangeetha Saraswathi

by P. B. SREENIVOS
Cine Play-back Artiste

Twenty five years ago, a slim, tall and young girl entered the silver-screen world, as a play-back artiste. This year, 1976, marks her Silver Jubilee career, most successful. P. Susheela, her name, is the present house-word of the entire South India, as well as many parts of North India.

Gifted with a golden and electric-guitar-like voice, Susheela rendered several thousands of songs in Telugu, Tamil, Malayalam and Kannada, and a few in many other Indian languages. She sang a Hindi solo also for the Hindi film BACHPAN, directed by Pratyagatma, under the music direction of Laxmikant and Pyarelal.

Time went on improving the timbre, culture and sweetness of her voice, which assisted by maturity and fine flexibility, could render any type of song with immaculate pronunciation, apt expression and unbelievable precision, with consummate ease and skill.

Calculated poise in her behaviour helped her a lot, in building up her career to crazy heights and enviable honours, she has now reached and received. With the ready help, constant encouragement and able guidance of beloved husband, Dr. B. Raja Rama Mohan Rao, she has become the undisputed ruler of her vast melody-queendom.

Her father, late Sri Pulapaka Mukunda Rao, an established criminal lawyer, was himself a good musician. Born in a big family of three brothers and six sisters, at Vijayanagaram of Vizag District in Andhra Pradesh, Susheela got her early education in her home-town itself.

Then she studied music in the Maharaja College of Vijayanagaram under the Principalship of the Violin-wizard, late Sri Dwaram Venkataswami Naidu, who blessed her profusely, for a brilliant future. She took her music diploma in first class and proceeded to Madras for further studies in slassical music, in the Music Academy, when Sri Musiri Subramanya Iyer was the Principal.

In those days, she used to give classical and light classical concerts through All India Radio, Madras, Vijayawada and Hyderabad stations. Gradually, she developed a keen taste for, and great interest in light and film music and started training herself constantly in those lines too. Luck too favoured her, at every step crowning each of her staunch endeavours with due success and glory.

Pendyala Nageswara Rao, the renowned music-director was all surprise and appreciation, when he first heard her mellifluent voice and flawless effective rendering. He instantly used her voice for the Telugu film 'Kanna Talli' and a series of song-recor dings followed, lifting her on to the top of the ladder of fame, rung by rung, song by song and film by film !

Good knowledge of Karnatic classical music served as a solid foundation for the multi-storeyed edifice of her career, strengthening her self-confidence considerably. Her zeal to improve herself at every stage, co-travelled with her, on the difficult path of progress and prosperity towards the goal of possible-most perfection, in her profession.

She was awarded with the first selection as the best songstress of the year since the inception of the award for ladies, on all India level by the Government of India in 1969. The same year bestowed on her another honour, conferred upon her by the Tamilnadu State Government as the Year's best female play-back singer. Again in 1971, P. Susheela won the most coveted award of Government of India, for the second time, in addition to the Kerala State Government selection as the best singing lady voice of the year.

Awards and rewards continued to adorn her talent often, various associations, in different languages, decided her as the best songstress of each year on several occasions.

Unprecedented kudos and laurels were showered on her, for each year's sterling singing-performance. Yet she never allowed success to go to her head, and hence is able to maintain carefully mental and movemental balance. She minds her own profession with pure devotion.

The one other thing which commands her personal attention is the affection of her only son, Jaya Krishna. A duty-bound house-wife, she is enjoying the sincere attention and affection in addition to the respect of all the inmates.

Some other favourites amongst music personalities are M. S. Subbalaxmi, Lata Mangeshkar, Asha Bhonsle, Parween Sultana and the late Ustad Bade Gulam Ali Khan, whose styles stood as trend-setters. She is herself a trend-setter of her own outstanding marvellous style.

On a special occasion, she was presented with a 'Silver Veena', the divine symbol of the Goddess of learning, SARASWATHI, by the Gramaphone Company Limited. Rightly, she deserves to be honoured with the unique title of SANGEETHA SARASWATHI.

May the presiding deity of Arts, Goddess Saraswathi bestow on her a new chain of successive successes and glories, along with unfailing health, wealth and strength ! ! !

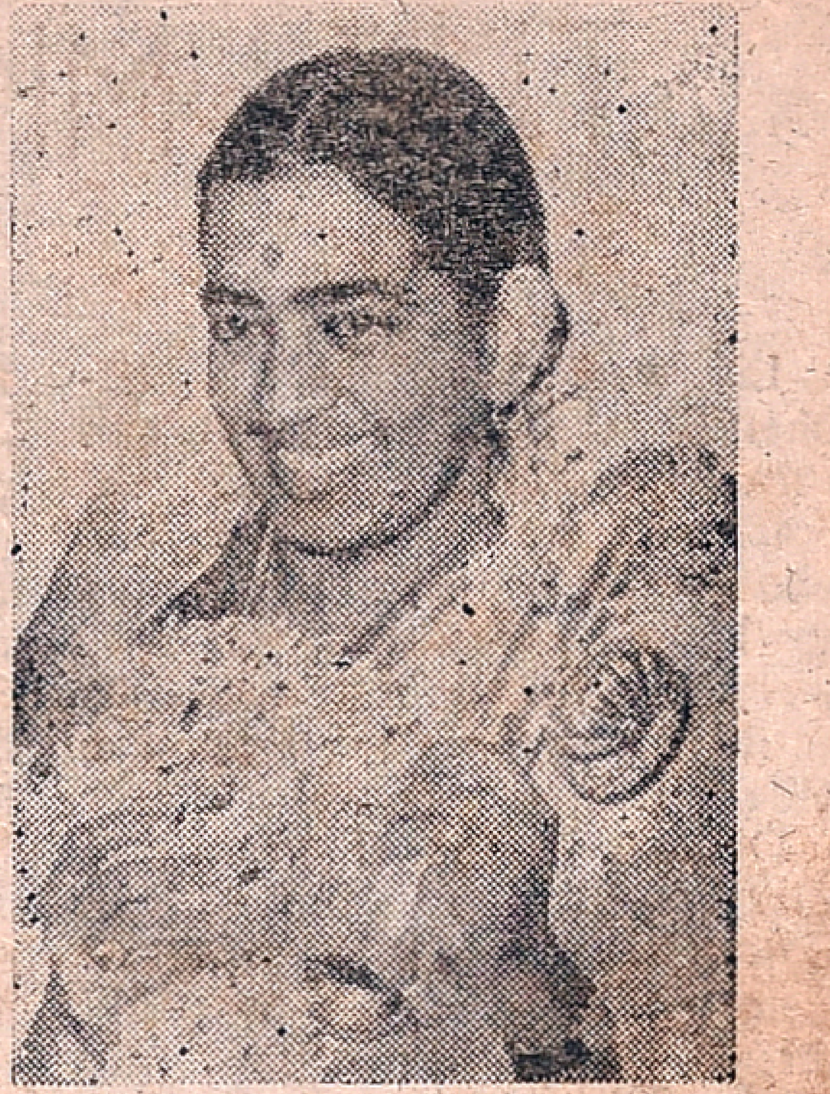
## P. Susheela

### "The River of Nector"

(The Silver-Jubilee Singing-Star)

★

By P. B. SREENIVOS
(Cine Play-back Artiste)



Purity of pitch is her boon !
Soft and sweet like the light of moon,
Unparalleled, is her nice voice,
Surely, it is a great choice !
Hailed by innumerable fans,
Ever, she keeps their hearts in trance !
Even rivals love her tone,
Luck has given her a lastingthrone,
And her Fame-flower is full-blown !
Talent has reaped the best harvest
Her profession has refused rest !
Earnestly, she gives her best !
Remarkable, is her singing skill !
In a word, she is each listener's thrill,
Verily, she is a Phenomenon !
Emulating her, is no fun!
Rewards and awards, she rightly won !
Outstanding great singing star,
Followed by each rising star,
Now she has entered Silver-Jubilee,
Escaping from pride very carefully !
Cleverly, she rules her Melody—Land !
Transgressing obstacles, for a long stand !
Almighty is very kind to her !
Rendering her career, much stronger.

From page 1

dominated by well-entrenched traditionalism. To take time by the forelock and set an example for overall extension of healthy curbs, the Union Government has come forward to ban dowry in the case of Government servants by an Executive Order, in these terms :

"In view of the current International Women's Year, it has been decided that executive instructions issued in 1966 which prohibited acceptance and giving of dowry by a Government servant should be made part of the Government Service Conduct Rules. Accordingly, a new Rule has been introduced in the Central Civil Service (Conduct) Rules, 1964 under which NO Government servant shall give or take dowry as defined in the Dowry Prohibition Act, 1961."

So dowry will henceforth be misconduct disqualifying the Government employee found guilty of it. New disciplines are to be enforced in all walks of life and the laudability of this new Rule for Government servants is too apparent to need emphasis.

For the generality of citizen-too there is a growing consciousness that the 1961 Dowry Prohibition Act should be amended to tighten the legal noose on those who take marriage as a money-transaction. Referring to the need for further statutary restrictions for one and all, a Government hand-out duly spells out: "Mention may be made of the Dowry Prohibition Act, 1961 which seeks to prohibit the giving or taking of dowry. It is an Act of general application and applies to everybody in India except the State of Jammu and Kashmir. There is however a general feeling that this Act has not served its purpose as the offences under the Act are not cognizable. This and other aspects of the law are being given a fresh look in the light of certain recommendations made by the Committee on the Status of Women in India."

There has been a persistent public demand that the Statute be amended and the penalties thereunder rendered fully deterrent. Active consideration by the Government of suggestions for a more rigorous law is reassuring. A well-organised public drive, while the law is in the process of being reshaped afterwards as an additional vigilance force, has an important role no doubt. And the reformers, encouraged by the Prime Minister's dynamic approach to national regeneration, should be able to make success of their crusade for elimination of retrograde customs and the suffering and stagnation they invariably lead to !

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